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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,921	07/29/2003	John J. Breen	16356.817 (DC-05156)	8117
27683 7590 02/26/2009 HAYNES AND BOONE, LLP IP Section 2323 Victory Avenue Suite 700 Dallas, TX 75219				
EXAMINER BOATENG, ALEXIS ASIEDUA				
ART UNIT 2838		PAPER NUMBER		
MAIL DATE 02/26/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

*Supplemental  
Notice of Allowability*

Application No.

10/628,921

Examiner

Alexis Boateng

Applicant(s)

BREEN ET AL.

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/10/08.
2. ☒ The allowed claim(s) is/are 1,3-6,8-10,12,14,15 and 19-22.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_.

//Edward Tso//  
Primary Examiner, Art Unit 2838

#### DETAILED ACTION

This action should replace the Action sent out 2/05/2009, which had errors.

#### *Allowable Subject Matter*

1. Claim Claims 1, 3 – 6, 8 – 10, 12, 14, 15, 19 - 22 are allowed. Regarding claim 1, the prior art does not disclose or suggest the combination of, inter alia wherein a method for converting an alternating current (AC) input to a direct current (DC) output, the DC output providing power to a load, the method comprising: receiving the alternative current (AC) input; receiving a first feedback signal indicative of a target voltage required by the load, wherein the first feedback signal is an external feedback; receiving a second feedback signal indicative of the DC output, wherein the second feedback signal is an internal feedback; providing a controller module included in an AC-DC adapter and operable to receive the first feedback signal and the second feedback signal; providing a converter in the AC-DC adapter; the controller module adjusting a control signal, responsive to receiving the first and second feedback signals, to the converter to maintain the DC output within a predefined range of the target voltage; and during a charging phase, a difference between the DC output and the target voltage is always positive while providing a charge to the load, and the DC output is reduced to a predefined value upon completion of providing the charge to the load. Regarding claims 3 – 6, 8 – 10, claims depend on claim 1. Regarding claim 12, the prior art does not disclose or suggest the combination of, inter alia, wherein an integrated alternating current (AC) to direct current (DC) adapter comprising: a rectifier

module operable to receive an AC input and generate a first DC output; a buck converter module operable to receive the first DC output and generate a second DC output responsive to a control signal; an AC-DC adapter; a controller module included in the AC-DC adapter and operable to receive a first feedback signal input indicative of a target voltage required by a load, wherein the first feedback signal is an external feedback, and a second feedback signal input indicative of the second DC output, wherein the second feedback signal is an internal feedback, the controller module adjusting the control signal, responsive to the first and second feedback signal inputs, to the buck converter module to maintain the second DC output to be within a predefined range of the target voltage; and during a charging phase, a difference between the second DC output and the target voltage is always positive while providing a charge to the load, and the second DC output is reduced to a predefined value upon completion of providing the charge to the load. Regarding claims 14, 15, 19 – 22, claims depend upon claim 12.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexis Boateng whose telephone number is (571) 272-5979. The examiner can normally be reached on 8:30 am - 6:00 pm, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Akm I. Ullah can be reached on (571) 272-2361. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AB  
//Edward Tso//  
Primary Examiner, Art Unit 2838